

Docket No. AREWP0105US

Serial No. 09/773,233

REMARKS

Claims 19-33 are pending in the present application.

Applicant respectfully requests entry of the present Reply, reconsideration of the application and allowance of the claims. Applicant submits that the claims are allowable over the prior art of record for at least the following reasons.

Applicant's Invention

As recited in the specification and in pending claim 1, the present invention relates to a multi-layer coating having a polished effect for the surface of an article of manufacture, the multi-layer coating comprising: a polymeric layer overlying the surface of the article; a metal layer overlying the polymeric layer comprising at least one atomized metal; a corrosion inhibiting inorganic layer overlying the metal layer, wherein the corrosion inhibiting inorganic layer is a conversion coating; and a transparent top coat layer overlying the corrosion inhibiting inorganic layer.

Applicant has discovered that application of a conversion coating to the metal layer comprising at least one atomized metal provides an unexpected benefit in that the conversion coating, applied to one side of the metal layer, actually provides corrosion protection to both sides of the metal layer. While it might be expected that the conversion coating would provide corrosion protection to a metal surface on which it is applied, it is wholly unexpected that the conversion coating would provide corrosion protection to both sides of the atomized metal layer. This benefit of the presently disclosed and claimed invention is neither disclosed nor suggested by the prior art. Thus, the conversion coating of the present invention provides more corrosion protection than would be expected, even if one thought to try applying a conversion coating to such a substrate, as the Examiner contends would have been obvious based on the asserted combination of prior art cited in the Office Action.

Docket No. AREWP0105USSerial No. 09/773,233**Rejection of Claims 19-21, 24-27 and 30-33 over Schwing et al In View of Das et al.**

Claims 19-21, 24-27 and 30-33 stand rejected as obvious over U.S. Patent No. 5,656,335, to Schwing et al., in view of U.S. Patent No. 4,422,886 to Das et al. The Examiner contended:

Schwing et al teaches a process for coating a substrate with a metal material giving a polished effect wherein the process includes cleaning the substrate 10 and forming a polymer base coating 12 on the substrate by burning on a powdered lacquer, coating the coated substrate with a metal 14 such as aluminum giving a polished effect by plasma deposition or sputtering within a vacuum chamber, and applying a transparent top coating 16 on the metallized layer by burning on a powdered lacquer, wherein the coated substrate may contain an optional intermediate protective coating between the metallized layer and the top coating layer, as well as an optional final scratch-proof protective coating on the top coating layer; and wherein the substrate may be a metal and the shaped body or substrate can be cleaned and degreased so that it can be subjected to conversion treatment followed by the drying prior to applying the base coating (Abstract; Col. 2, lines 22-31; Col. 3, lines 1-42.) Schwing et al teach that the method of utilizing a powdered lacquer helps to overcome environmental hazards and corrosion protection problems of previous methods utilizing a wet lacquer (Col. 1, lines 7-33.)

The Examiner admitted that Schwing et al. fails to teach application of a conversion coating over the metal material layer.

The Examiner sought to remedy this substantial shortcoming of Schwing et al. by resorting to Das et al., which the Examiner contends discloses a conversion coating that would have been obvious to apply to the metal material layer of Schwing et al. prior to application of the protective polymeric layer disclosed by Schwing et al.

With respect to Das et al., the Examiner contended:

Das et al. teach an improved surface treatment for aluminum and aluminum alloy surfaces wherein an inorganic conversion coating comprising zirconium salts is applied to

Docket No. AREWP0105US

Serial No. 09/773,233

the aluminum surface to improve corrosion resistance of the aluminum surface and to improve adhesive of subsequent coating or lacquer layers applied to the treated aluminum surface.

Whereupon, the Examiner concluded that it would have been obvious to apply the conversion coating of Das et al. to the aluminum metal material layer of Schwing et al. The Examiner contended that the motivation to utilize the conversion coating of Das et al. would be "to provide improved corrosion resistance and improved adhesion to the subsequent polymer coating layer(s) given the reasonable expectation of success."

Applicant respectfully traverses this rejection.

Schwing et al. includes neither disclosure nor suggestion that any sort of additional corrosion protection might be needed for the metal material layer. To the contrary, Schwing et al. specifically teach:

The top coating provides for good mechanical and chemical resistance.

See, col. 3, lines 21-22. To a person of ordinary skill in the art, Schwing et al. would be considered to teach at least that no additional corrosion protection is needed.

Das et al. teaches coating solutions for forming conversion coatings on a variety of metal surfaces such as aluminum plate, aluminum cans and aluminum strip including rigid container stocks, beer and beverage end stocks, architectural and building products and extrusions. Col. 3, lines 28-34. None of these metal surfaces include a thin metal layer such as the at least one atomized layer of the present invention. There is no suggestion in Das et al. to apply the conversion coating thereof to such an atomized layer as that of the present invention.

The fact that the Das et al. conversion coating may provide good adhesion to overlying layers is necessary to the end product of Das et al., and may actually result

Docket No. AREWP0105USSerial No. 09/773,233

not from the zirconium conversion coating itself, but from the additives such as the fluorophosphate compound and wetting agent noted at col. 3, lines 37-39.

Thus, Applicant respectfully submits that Das et al. provides no motivation to make the contended selection of elements from the cited references and the combination thereof, which showing is required to state a *prima facie* case of obviousness. The Examiner must provide evidence in support of the alleged motivation to combine and modify references. Broad conclusory statements standing alone are not "evidence." See, *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Applicant respectfully submits that the Examiner's conclusory contention that the motivation would have been as stated is wholly insufficient and does not constitute the requisite evidence of motivation.

Applicant submits that the best that can be said for the alleged combination of Das et al. with Schwing et al. is that these references may possibly present an "obvious to try" situation. It might be obvious to try applying the conversion coating of Das et al. to the metal material layer of Schwing et al. (after first selecting aluminum from the various metals disclosed by Schwing et al.), but this is legally insufficient to render obvious the presently claimed invention. However, "obvious to try" is not the standard for obviousness, and does not support a *prima facie* case of obviousness. See, *In re O'Farrell*, 7 USPQ2d 1673, 1680-81 (Fed. Cir. 1988).

Applicant submits that while a person might think of trying the Das conversion coating process to the metal layer of Schwing, there is no motivation to do so, and no basis for having a reasonable expectation that doing so would be successful in providing any additional corrosion protection. Both the motivation and the reasonable expectation of success are required to support an obviousness rejection. Applicant submits that both are missing in the present case.

At best, the Examiner has shown that the reference teachings *could* be combined, but has not shown a teaching or motivation that they *should* be combined. Thus, the asserted combination appears to be the result of hindsight reconstruction of

Docket No. AREWP0105USSerial No. 09/773,233

Applicant's invention, based on Applicant's disclosure, not on what was in the prior art at the time the invention was made.

Furthermore, Applicant submits that the references do not contain any teaching which would lead a person to have a reasonable expectation of success, contrary to the Examiner's contention. While selection of the elements may be possible with the aid of hindsight, there is nothing to suggest that the combination of the teachings of the two references would provide a person with an expectation of success in obtaining improved corrosion protection or in reaching the claimed invention, since there is no reason to select the particularly claimed combination of elements.

Therefore, there can be no *prima facie* case of obviousness, since there is no motivation to make the selection and combination of elements from the cited references to reach the claimed invention, and no reasonable expectation of success.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Applicant's claims 19-21, 24-27 and 30-33 over the asserted combination of Schwing et al. and Das et al.

Rejection of Claims 22-23 and 28-29 over Schwing et al. in view of Das et al. and further in view of Mokerji.

Claims 22-23 and 28-29 stand rejected as obvious over Schwing et al. in view of Das et al. and further in view of Mokerji. The Examiner admitted that neither Schwing et al. nor Das et al. teach applying an organopolysiloxane coating, she contends that it is well known in the art that an organopolysiloxane topcoat layer can provide improved protective properties to a coated substrate, such as abrasion and scratch resistance taught by Mokerji, and so it would have been obvious to apply such a coating the "invention" taught by Schwing et al. and Das et al.

Applicant traverses this rejection for the same reason as above, and since Schwing teaches that a final coating "consisting of a carbon compound that is highly resistant to scratching" may be applied, there would be no reason to look elsewhere for

Docket No. AREWP0105US

Serial No. 09/773,233

an organopolysiloxane coating, which is outside the ambit of the "carbon compound" mentioned by Schwing et al.

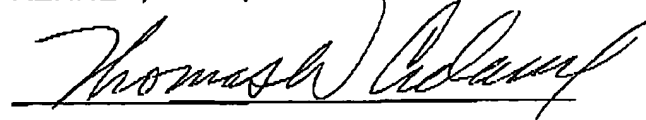
Conclusion

For all the foregoing reasons, Applicant respectfully submits that the presently claimed invention fully distinguishes over the prior art of record, whether taken alone or in combination. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the asserted rejections of Applicant's claims and to issue a Notice of Allowance therefor.

In the event issues arise as a result of the filing of this paper, or remain in the prosecution of this application, Applicants request that the Examiner telephone the undersigned attorney to expedite allowance of the application. Should a Petition for Extension of Time be necessary for the present Reply to the outstanding Office action to be timely filed (or if such a petition has been made and an additional extension is necessary) petition therefor is hereby made and, if any additional fees are required for the filing of this paper, the Commissioner is authorized to charge those fees to Deposit Account #18-0988, Docket No. AREWP0105US.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP



Thomas W. Adams
Reg. No. 35,047

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
Telephone: (216) 621-1113
Facsimile: (216) 621-6165

B:\Adams-Tom\Client Files\AREW0105\arew0105,ROA3-AF.wpd